

GILA RIVER BASIN

09490500 BLACK RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33° 42'46", long 110° 12'40", in NW_{1/4} sec. 12, T.4 N., R.20 E. (unsurveyed), Gila County, Hydrologic Unit 15060101, on downstream side of first pier from right bank on highway bridge, 5 mi upstream from confluence with White River and 14 mi west of Fort Apache.

DRAINAGE AREA.--1,232 mi².

PERIOD OF RECORD.--Oct. 1912 to Dec. 1915, Sept. 1916, Oct. 1917 to Jan. 1918, Apr. 1918, Oct. 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914–15, drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,345 ft above sea level, from river-profile map. Nov. 1912 to July 1918, nonrecording gages or water-stage recorders at several sites within 1 mi of present site at various datums.

REMARKS.--No estimated daily discharges. Records good. One transbasin diversion for industrial and municipal use (see record of Willow Creek diversion from Black River, near Morenci). Negligible storage in several small recreational lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,700 ft³/s, Jan. 8, 1993, gage height, 28.10 ft, from rating curve extended above 8,500 ft³/s on basis of slope-area measurements at gage heights 22.33 ft and 24.80 ft; minimum daily, 11 ft³/s July 6, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11.....	1015	2,530	*6.36

Minimum daily discharge, 20 ft³/s, June 22, 25, and 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	41	46	57	52	56	52	38	24	21	105	46
2	36	42	48	57	44	55	48	34	23	23	82	43
3	36	43	49	55	51	54	47	32	22	23	71	42
4	38	43	52	53	58	52	45	31	22	22	170	38
5	39	44	52	55	57	48	44	31	22	23	137	37
6	39	46	51	47	55	48	44	30	22	23	136	35
7	42	47	50	47	52	48	46	30	22	22	183	34
8	43	47	48	53	50	55	52	29	22	24	157	35
9	48	48	45	53	51	58	63	27	22	24	132	39
10	64	47	41	52	51	60	62	27	22	24	185	94
11	57	47	43	53	48	59	54	28	22	64	197	787
12	52	45	48	53	49	57	50	31	21	46	144	643
13	48	45	55	53	49	55	47	29	21	36	104	454
14	45	45	44	53	51	56	44	29	23	44	79	274
15	44	45	37	50	52	57	42	29	23	55	64	196
16	44	46	46	49	53	58	41	28	22	40	54	153
17	42	47	50	52	54	57	40	27	23	38	53	127
18	42	47	47	50	53	56	39	27	22	78	47	111
19	42	47	45	50	54	52	38	27	21	55	44	98
20	41	47	52	49	55	53	37	27	22	51	42	83
21	41	47	57	42	57	52	37	26	22	61	41	74
22	41	47	59	38	54	52	36	26	20	59	50	68
23	41	47	53	42	53	51	36	26	21	55	68	61
24	41	48	49	52	54	51	35	26	21	48	55	55
25	41	49	57	44	55	52	34	26	20	95	46	50
26	41	55	49	40	55	52	34	26	21	83	39	47
27	41	52	37	45	56	53	33	26	22	297	34	44
28	41	48	44	59	57	52	33	26	20	755	30	43
29	41	46	53	65	---	52	37	25	21	312	32	41
30	41	42	63	57	---	54	38	25	23	237	33	39
31	41	---	59	58	---	54	---	25	---	149	37	---
TOTAL	1329	1390	1529	1583	1480	1669	1288	874	654	2887	2651	3891
MEAN	42.87	46.33	49.32	51.06	52.86	53.84	42.93	28.19	21.80	93.13	85.52	129.7
MAX	64	55	63	65	58	60	63	38	24	755	197	787
MIN	36	41	37	38	44	48	33	25	20	21	30	34
AC-FT	2640	2760	3030	3140	2940	3310	2550	1730	1300	5730	5260	7720
CFSM	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.08	0.07	0.11
IN.	0.04	0.04	0.05	0.05	0.04	0.05	0.04	0.03	0.02	0.09	0.08	0.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 – 2002, BY WATER YEAR (WY)

MEAN	209.7	157.6	353.2	407.9	580.2	1029	1114	477.0	105.5	86.28	183.7	141.7
MAX	2725	769	2449	4904	3145	3864	4423	3109	448	763	659	650
(WY)	1984	1995	1979	1993	1980	1978	1915	1973	1973	1915	1959	1988
MIN	30.6	36.7	38.4	36.8	52.9	50.2	42.9	28.2	16.9	23.3	34.9	30.5
(WY)	1974	1976	1977	1976	2002	1999	2002	2002	1974	1994	1975	1960

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1915 – 2002

ANNUAL TOTAL	76001		21225		405.9	
ANNUAL MEAN	208.2		58.15		1200	1915
HIGHEST ANNUAL MEAN					52.6	2000
LOWEST ANNUAL MEAN					32600	Jan 8 1993
HIGHEST DAILY MEAN	1240	Apr 7	787	Sep 11	11	Jul 6 1974
LOWEST DAILY MEAN	34	Jun 20	20	Jun 22	12	Jul 1 1974
ANNUAL SEVEN-DAY MINIMUM	35	Jun 30	21	Jun 22		
ANNUAL RUNOFF (AC-FT)	150700		42100		294100	
ANNUAL RUNOFF (CFSM)	0.17		0.047		0.33	
ANNUAL RUNOFF (INCHES)	2.29		0.64		4.48	
10 PERCENT EXCEEDS	716		66		1110	
50 PERCENT EXCEEDS	76		47		99	
90 PERCENT EXCEEDS	41		24		38	